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A LECTURE ON EPISTAXIS, VEL HÆMORRHAGIA NASI.

By N. Chapman, M. D., *Professor of the Theory and Practice of Physic, in the University of Pennsylvania.*

(Concluded from page 118.)

Epistaxis exacts some difference in the treatment.

Connected with a state of vascular force, or cerebral determination, the blood should be permitted to flow as an effort of nature to afford relief, and, when demanded, we have to call to her aid venesection, or local bleeding, and successively, the evacuant and antiphlogistic measures of nearly every description.

To obviate a recurrence of this state of things, the same course may be required to be pursued for a length of time, consisting in occasional bleeding, purging, the liberal use of the nitrate of potash, low vegetable diet, moderate exercise, and in the careful avoidance of the exciting causes.

It has, indeed, been questioned, how far it is proper, under such circumstances, to interfere at at all with a hæmorrhage usually so beneficial. The fact is, that our exertions are intended for the removal of the condition producing it, and which, if allowed to remain, instead of this safe discharge from the nostrils, may occasion a cerebral or some other effusion, where the consequences become alarming, or even fatal.

Epistaxis, however, is, also, of a less active nature, and is then marked by no repletion of the circulation. The pulse is without augmentation of volume, or force, or may be considerably below the natural degree in these respects, or small, quick, and irritated, denoting a debilitated system, and which is further manifested by the pallid, or sallow skin, cold feet, soft and flabby integuments, and loss of muscular power. The blood which escapes is of a light colour, and very thin, as if diluted with water,—yet local congestion may here, sometimes, be detected. Cases of this sort are exceedingly troublesome, recurring very frequently, and sometimes alarmingly copious, and difficult to be restrained.

In the absence of all fulness or excitement, we are called, at once, to suppress the hæmorrhage, as any further expenditure of blood is not allowable, and to effect which a variety of expedients, regular or domestic, have been proposed. The patient is to be placed sitting, in a cool situation, even in a draft of air, with the head inclined backwards, and the feet immersed in a stimulating warm bath. Cold applications, as a cake of ice, or cloths wrung out of the coldest water, are next to be made to the nostrils, or back of the neck, or to the genital organs, which last, having great sensibility, such applications to them prove very effective. Let, at the same time, the sides of the nose be pinched by the fingers, till a coagulum is formed. These means not availing, dossils of lint, dipped into a solution of the sulphate of alumine, or the acetate of lead, or the sulphate of zinc, or copper, or the muriate or sulphate of iron, or the infusion or tincture of galls, or kino, or catechu, or the gallic acid, or the creosote, or some other styptic, should be pushed up the nostril. Blowing some pulverulent matter through a tube into the nostril, flour, or starch, or chalk, or Armenian bole, or charcoal, sometimes answers even better. The coal of a burnt cork, pulverized, is particularly recommended by Sims of London; the dust forming a coat over the surface of the membrane, chokes up the mouths of the patulous vessels.

In very intractable cases the head may be dipped in cold water, rendered intensely so by the addition of ice, which is said to be decisive by Darwen and other authorities.

An immersion of the whole body in a cold bath has been advised, and we are not without evidence of its complete success.* The patient, however, should continue in it for some time, so as to attain the sedative effect, or otherwise the object would be defeated by the powerful reaction excited by the sudden impression of the remedy. Yet it is the more common, in such emergencies, to endeavour to effect compression, by introducing a piece of sponge, properly shaped, into the nostril. This may be pushed in by a probe, or, where the bleeding proceeds from vessels very high up, it is suggested to tie a piece of catgut to the sponge, carry it through the posterior nares by a probe, and out of the mouth, by which the sponge can be completely drawn up. But though this is generally recommended, it will, I apprehend, be found exceedingly difficult in execution, from the extreme irritation induced in the muscles of the pharynx, and is altogether so uncomfortable, that it will seldom be submitted to long enough to be of any service. I recollect that it was a remark of Mr. Abernethy in one of his lectures, that though he had often tried to do it, he had been uniformly baffled in the attempts. But, at the same time, he told us, that he had not seen a case in which he did not succeed in suppressing the hæmorrhage, by a plug exactly shaped to the cavity of the nostril, made of lint, first wetted, and wound round a probe, which may be withdrawn on the introduction of the lint, keeping the latter in for several days.

An emetic, except it be positively contra-indicated by great exhaustion, I think ought to be tried in an emergency. It is only in a single

* Philadelphia Journal of the Medical Sciences, vol. ii.

case, that of an aged and infirm man, that I have ventured on the practice,—and though it did not succeed, it was productive of no mischief. Emetics, however, on the authority of Stoll, have been used advantageously. They sometimes prove very decisive in diverting blood from the head,—and their control over the capillary system is not less established, on which views, we should be warranted in resorting to them, independently of the positive testimony I have cited, or any analogical conclusion from their efficacy in other hæmorrhages.

To evacuations of the bowels, unless constipation exists, no importance has been attached. But on every account, it seems to me, that a strong impression by an active, even drastic cathartic, promises well. The acetate of lead, and similar articles, alleged to be so useful in most other hæmorrhages, I do not think exercise here any power. But I am strongly inclined to suspect that opiates are of great value. For the last few years, I have occasionally directed them with success. It is, indeed, only a week or two ago, that I witnessed signal advantage from a dose of the Dover's powder, in a case that previously had very obstinately resisted the customary means, to which I was called in consultation with Dr. Jackson. The Dover's powder I have found to be incomparatively the best of the opiate preparations. How it operates, I pretend not to determine with any precision. It may be by producing a change in the nervous system, certain conditions of which must undoubtedly influence hæmorrhage,—though something, I think, is also ascribable to the emetic substance entering into the composition of the remedy, as without it, neither opium, nor its simple preparations, have an equally beneficial effect,—and this conjecture is rendered the more probable, from the reputation ipecacuanha, in small portions, has long had in the hæmorrhagic affections.

Having arrested the bleeding, the patient may be permitted to repose in bed, with the head and shoulders elevated. But in children, care ought to be observed, that the blood is not flowing through the posterior nares, as it occasionally does, when apparently checked, producing much inconvenience.

To do away the disposition to a recurrence, which in some instances is exceedingly inveterate, it is required to pursue a course of prophylactic measures. As a leading part of the plan, an endeavour is to be made to equalize the circulation, the balance in which is often subverted by a tendency to the head, and at the same time cautiously to recruit the tone and energies of the system. The first of these purposes, provided there be not too great debility, is met by purging, which is useful in the affections of the head generally, and particularly so in this, from torpor of the bowels usually attending it. Counter-irritation is likewise serviceable, and a blister to the nape of the neck has of itself very frequently accomplished a cure. The application, however, of vesicatories may sometimes be made to the lower extremities, acting as divellents.

As a dernier resource, mercury urged to a slight salivation is said to have been appealed to with advantage, in singularly obstinate cases, though it is not to be indiscriminately employed. Certainly, it would prove injurious in the cachectic condition, dependent especially on a scorbutic or tubercular diathesis, and, perhaps, is most or only appropriate when the attack proceeds from lesions of the abdominal viscera, as we shall presently see.

During the progress of this treatment, it may be found, though the general circulation be weak, there are manifestations of cerebral determinations, to relieve which, cups or leeches may be applied.

Thus having prepared the system, tonics, as the sulphate of quinine, alone, or with the chalybeates, or the mineral acids, and a nourishing, though temperate diet, with regulated exercise, are to be directed.

Of the idiopathic shape of the disease, I have nothing more to say. But it is also met with of a secondary nature, proceeding from metastasis, or is the effect of diseased viscera, the liver, or spleen, &c. It is plain, in the management of such cases, having suppressed the flow, attention is to be called to the primary affection, to re-establish the hæmorrhoidal or catamenial discharge, or to remove the morbid condition of the viscus affected, as the one or the other may be the remote cause of the hæmorrhage. But I shall decline now pointing out the remedies, as I should be anticipating what will hereafter become a subject of ample discussion.

FOREIGN CORRESPONDENCE.

LETTER FROM DR. HARLAN.—No. I.*

Dinner at Professor Lawrence's—Visit to St. Bartholomew's Hospital—Visit to Bedlam—Visit to Guy's Hospital—Visit to Sir Astley Cooper—Visit to the College of Physicians—Professor Owen's Researches upon the intimate structure of the Teeth.

LONDON, January 7th, 1839.

To the Editors of the Medical Examiner.

GENTLEMEN,—Agreeably to my promise to communicate to you any thing curious or new that might come under our notice during our professional visit to London and Paris, I now have the pleasure to address you a few lines, and place the letter at your disposal, supposing that there should be any thing in it worthy of public notice.

Three weeks have scarcely transpired since our arrival in London;—we have lost no time in our explorations, but we have seen much to admire and to gratify our professional curiosity. We had the honour to take our Christmas dinner with Professor Lawrence, 18 White Hall Place,

* No. 2 was published in No. 8 of the Examiner.

in company with some scientific friends. Mr. L. is already too advantageously known to most American physicians who have visited Europe, and partaken of his hospitality, to require any eulogiums from me. It is saying much to assert that his colloquial powers and talents to please equal those powers of composition which have already sent his name to all parts of the civilized world, and which will transmit it with honour to a distant posterity. The day following we met by appointment at St. Bartholomew's Hospital, and went the rounds with him. We learned that the cases of "Grande Verole" seldom presented themselves in such aggravated forms as with us: only two fatal cases occurred in one of the largest wards of this hospital during the last year. Professor L. pursues a medium path in the treatment of syphilis—administering mercury in some cases and stages. A convenient lecture room and dissecting rooms are connected with the hospital, whence we were inducted into the Anatomical Museum, rich beyond our most sanguine anticipations in pathological specimens, admirably prepared and preserved, as well as numerous preparations illustrative of human and comparative physiology and anatomy.

Professor L. prescribes at the hospital three times weekly, from 12 to 2, and lectures on surgery at 7 P. M., thrice weekly.

We next accompanied Mr. L. in his beautiful equipage to *Bedlam Hospital*. There, after being duly inducted into the mysteries of the Mènage, we were gratified with a view of several instructive cases of disease,—one, in particular, that of a maniac from epilepsy, who had attempted suicide by thrusting his head into burning coals,—the whole of the calvarium had exfoliated, and is preserved in the Museum of St. Bartholomew's. His disorder was in no manner relieved or affected by this severe cautery. The parts have been for many years covered with a hairless scalp. The brain is much flattened by atmospheric pressure, and its pulsations are very perceptible. Margaret Nicholson, who attempted the life of George III., and some of my old acquaintances among the crown prisoners, had paid the debt of nature,—Martin, who fired York Minster, in religious fanaticism, among the rest. Hatfield, who discharged a pistol at George III. in the theatre, still lives, and amuses himself with pelting small birds and quadrupeds, and writing doggerel verse. There are other prisoners condemned for life, being convicted of "crimes against nature."

Our attention was next directed to Guy's Hospital. This institution, formerly subsidiary to St. Thomas's, its opposite neighbour, is now second to no institution of the kind in Great Britain,—its museum, indeed, being unrivalled in the department of morbid anatomy. Nothing could be more complete and admirable than the representations in coloured wax of every genus, species, and variety of *cuticular* diseases, all scientifically arranged and ticketted,—thus rendering a class of disorders, exceedingly complicated and difficult to distinguish under ordinary resources, very easy of comprehension. Among the most striking of these, is the model of the upper half of the body of the patient who died a few months since, of "glanders," in its most exaggerated form—the history of which was detailed in the hospital reports, and attracted great attention from its rarity,—the eyes, nose, mouth, and all the mucous surfaces, appeared to be melting away, ulcerated, and discharging a copious sanies. Eruptions covered the fore part of the body, and gangrene had commenced about the shoulders and back. The sufferer had been a cab driver, and contracted the disorder by wiping the nose of his glandered horse with his handkerchief, and subsequently using it on his own person. Sir Astley Cooper first detected the nature of his complaint. It is somewhat remarkable that this noble and useful charity originated in the bad feelings of its founder, and has lately been further endowed by a similar cause. Mr. Guy, it appears, was a miserly bookseller, who amassed a large fortune by trade, and increased it by his frugality. He took a notion to marry his maid or housekeeper in his old age, and dissolved the engagement in a rage, when he found, on his return one day, that his intended had exceeded his commands in some repairs he had ordered to be made in the pavement before his door, in preparation for his marriage. The lady, calculating too surely on her conquest, instructed the workmen to add a few more bricks, on her own responsibility,—on discovering which, Mr. G. drove her from his house, and willed all his property to endow the hospital which bears his name. The recent accession of half a million dollars was obtained from a retired merchant of rather aristocratical notions. He had intended to leave his fortune to a brother, who, on dining with him one day, unceremoniously took a potato in his fingers and dipped it into the saltcellar. On being reproved for his indecency, he answered, that his brother and his potato might

both be d——d! He was, in consequence, disinherited, and Guy's Hospital endowed. There have been added since my visit in 1833, a new cabinet for the museum, and other valuable additions have been and are daily making. B. Cooper, Bright, &c., are now prescribing and lecturing here. These surgeons have able emulators in Travers, Tyrrel, Green, &c., at St. Thomas's, which was formerly the theatre of Sir Astley Cooper's operations, and is a more ancient institution than Guy's, having been founded by Edward VI., who died in his youth, and whose bronze statue in the square of the hospital is one of the most graceful and perfect specimens of art. We were kindly inducted here by Mr. Solly, who lectures on comparative anatomy and physiology in this institution. He directed our attention to some fine specimens of injected morbid preparations,—many by the hands of Sir Astley himself. The opportunities for pursuing practical anatomy appeared to be on rather a larger scale, than in most other places in London; but even this will bear no comparison with similar facilities in Paris, or even in the United States. On inquiring the present price of subjects, we were informed that students did not think of appropriating a whole subject to themselves, but paid about two dollars each for the eighth of a subject, and that in some institutions they could obtain none during the whole winter!

At one time, twenty or twenty-five guineas were demanded by the "jackalls" for each subject;—this was during the excitement created by the developements made on the trial and conviction of Hare and Burk—the excitement and terror of the citizens being carried so far, as to induce them to remove the bodies from whole grave-yards. A teacher of practical anatomy, (Mr. Miller, I think,) who endeavoured to oppose the monopoly and extortion of the "dealers," and obtained subjects necessary for his demonstrations by his own personal labour, was informed against by the "trade,"—was convicted, and died in jail!

It is the custom, at this season of the year, for the "haut-ton" to leave the city, and enjoy the Christmas festivities at their country seats,—we thus twice failed in our attempts at a personal interview with Sir Astley Cooper, but we were richly repaid for our trouble when we at last succeeded in seeing recently the cynosure of British surgery, now in the seventy-first year of his age, and the fifty-fifth year of his career. He appears but little altered during the five years elapsed since my last interview. Replete with honours and riches, he enjoys the blessings of a green old age—his intellect still unshattered. He revels in past recollections, and he discourses on subjects connected with his profession with the enthusiasm of youth. Up to this moment, he amuses himself and instructs the world by his physiological investigations and experiments on living animals. We were delighted with the clear and admirable manner in which he illustrated some of the most important functions of the human body. There was much novelty to us in his mode of explaining his views of the "secondary nature of the nervous system." His motto would appear to be, "Omnia ex sanguine." He has proved by experiment that the carotid arteries have little, if any, connexion with the functions of the brain, these depending principally on the *vertebral arteries*. He showed us admirable preparations, made by his own hands, of the dog and rabbit, in which the carotids in some cases, and the vertebrals in others, and in some instances where all four of these important vessels had been tied, and where the anastomosis continuing the circulation constituted a beautiful "rete mirabile."

His memoirs on this interesting subject are published in Guy's Hospital Reports, No. 3.

Sir A. kindly presented us with copies separately published, and illustrated by finely coloured plates. Numerous other specimens of anatomy, prepared by his own hands, were brought forward, and lucidly explained,—indeed, many of his minute injections, both with mercury and the usual fine injection materials, for the illustration of some of the more obscure and important organs of the body, are acknowledged by all who see them to surpass every thing of the kind.

Numerous engagements for the day obliged us to withdraw from the society of this distinguished surgeon and admirable man, much sooner than was desirable on our part; not, however, before he had expressed a just tribute to the memory and talents of our beloved PHYSICK—inquiring after Dr. WARREN—offering me in the kindest manner letters to distinguished surgeons in Paris—giving his card as an introduction to all the hospital surgeons of London, and inviting us to return on an appointed day, to witness some physiological experiments on a living rabbit, an opportunity we have no disposition to neglect.

We next proceeded to visit the Hall of the *College of Physicians*, a magnificent new building in Pall Mall East, erected in 1825. The

"College" was founded in 1518 by Dr. Linacre; an act of incorporation was obtained from Henry VIII. As a professional body, the college has slept of late years—though formerly possessed of great powers and privileges. Recently they have shown some manifestations of a determination to arouse themselves from their lethargy, and have issued a proclamation declaring their intention of resuming the power invested in themselves alone to grant degrees or license to practice physic—a privilege they have permitted occasionally to pass into the hands of other lecturers. It is their intention to confer the degree upon all who submit to and pass examination, independently of the when and where and with whom the candidate may have studied medicine. This medical "ukase" of the college has not been well received by the practitioners of London.

The basement story of the "College" is occupied by small rooms for offices on one side, and by a large dining room, the entire length of the building, on the other side—containing a large oaken table in the middle, and wainscoating of the same material, all brought from the old Hall. Hung round are good portraits of Drs. Meade, Garth, Heberden, Hale, the two Tysons, &c. The library and museum principally attracted our regard, the latter being the depository of the celebrated preparations by which the immortal Harvey illustrated the circulation of the blood. They consist chiefly of the *arteries* of the whole human body carefully dissected out, so as to preserve their continuity, spread whilst recent on a smooth board and dried, as in some of the old Roman preparations—there are two others, also of adult size, with the veins and nerves similarly prepared—these were deposited in 1654, and are in pretty good preservation, with the exception of some parts of the smaller veins, which sacrilegeous hands have barbarously abstracted as relics. Further depredations have been obviated by coarse brass nettings or frames, at present placed before these sacred monuments of the imperishable renown of the author. The museum contains other rare and curious anatomical pieces well worth examination, both from their intrinsic value, and from the frequent references made to them by able and respected authorities. The library is extensive, but appeared rather antiquated—portraits of Harvey and Ratcliff embellish this room. A censor's room and lecture room are also on the second floor—they contain a fine bust of Sydenham, and another by Chantrey of Sir H. Halford—an admirable half length portrait of Vesalius from the Italian school—of Sir Hans Sloan, Glisson, Baily, Meade, Sydenham, Heberden, the two Hunters, and numerous other eminent physicians—also, an interesting picture representing John Hunter lecturing on anatomical proportions from a living man, before the school of design, &c. &c.

We have not time at present to detail observations made during frequent visits to the Royal College of Surgeons, or our interview with Dr. James Johnson, and other eminent physicians. We have accepted invitations to dine with the clubs of the Royal Society—Linnean, Geological, and Zoological Societies—all of which will afford ample resources for future communications.

We must now proceed to mention the results of an evening delightfully passed with Mr. R. Owen, curator of the museum, in examining a novel subject of anatomical research.

December 31*st.*—In company with Mr. Van Buren, we visited, by invitation, Mr. Richard Owen, curator of the Royal College of Surgeons, at 6½ P. M., for the purpose of examining with the microscope numerous specimens of the teeth of various animals, recent and fossil, prepared by Mr. O. with the view of illustrating the intimate structure of these organs, in a memoir which he is now preparing for the Philosophical Transactions, London.

According to Mr. O.'s investigations, the human tooth consists of enamel, ivory, and the "*pars petrosa*," or cement; or, of a central pillar of ivory, covered by enamel on the crown and body, and with cement around the root and cervix. The structure of the ivory is essentially tubular, consisting of animal cylinders or tubes proceeding from the central cavity transversely to the axis of the tooth, to the sides, and perpendicularly to the crown, so as to oppose their distal extremities to the points of greatest pressure: these tubes he names "calcigerous," as they are found to contain the earthy part of the tooth; they are occasionally observed to extend beyond the line of juncture of the ivory with the enamel, as if for the purpose of increasing the attachment between the two surfaces, but are generally received, and are lost in the body of the ivory; each of these tubes is separated from its neighbour by a space greater than its own diameter, which space is filled by lateral tubes of a similar nature, and terminating in cells. The tubular structure of this ivory, Mr. O. is well aware, was not only known, but adequately illustrated, by

Lewenhœck. These calcigerous tubes do not run in a straight line, but their general tendency is a curvature upwards, and, in addition to which, each line or tube is distinctly waved in itself. These facts Mr. O. lucidly illustrated in numerous prepared specimens from the teeth of the human subject, those of the shark, both fossil and recent, the horse, the fossil icthyosaurus, iguanodan, the elephant, the megatherium, dinotherium, several fishes fossil and recent, and others equally instructive.

Mr. O. further illustrated his subject, by referring to the pathology of these organs; he had examined numerous decayed teeth, in every instance of which the caries had commenced in the space or position beneath the enamel, between it and the ivory, and had extended itself towards the central cavity in the direction of the calcigerous tubes, a phenomenon by no means explicable by the usually received notions of the laminated structure of the teeth. The original cause of decay in these cases, Mr. O. refers to the generation of an acid, or at least, of a fluid which soon becomes acid, between the enamel and the ivory.

Mr. O. next proceeded to illustrate the structure of enamel, by means of the same excellent microscope of Pritchard; this striated structure is of a crystalline texture, the striæ consisting of hexahedral prisms, always arranged at right angles with the superfices, a disposition which offers the greatest resistance to friction; these striæ differ in color and density from the ivory.

The "pars petrosa," or cement is always *tubular* in structure, appearing under the microscope as lines interspered with minute black dots, or corpuscles; these tubes he denominates "*medulliferous*," inasmuch as they carry marrow; and in most other respects, this cement resembles ordinary bone in structure and composition. Another important discovery due to the researches of Mr. O. is the peculiar structure of the teeth of the megatherium; these were formerly described by Cuvier as pillars of bone surrounded and traversed by enamel. Mr. O. demonstrates that portion of these teeth usually considered as enamel, to consist of a finer and denser kind of ivory; the body of these teeth consists, therefore, of common ivory, traversed by transverse ridges of denser ivory, and surrounded by cement, or pars petrosa. In all cases these interesting and novel facts were abundantly illustrated by numerous objects, both of human and comparative anatomy, and bore ample testimony to the acumen and laborious research of the experimenter, and of the important results to physiology to be derived from investigations of comparative anatomy, and which reflect on our neglect at home of this indispensable department of experimenal philosophy. You will find a notice of these admirable investigations of Mr. Owen, in the account of the last meeting of the "British Association" at Newcastle published in the London Athenæum, which will be completed "in extenso" in the forthcoming volumes of the "Transactions of the Royal Society." The "Memoirs" will appear in Decades, and be beautifully illustrated.

We were further impressed by a most curious fact connected with these interesting microscopic investigations of Mr. O. viz: that the different *species* of animals were shown to be recognisable by specific arrangements of their dental structure!

BIBLIOGRAPHICAL NOTICE.

An Essay on Scarlatina. By James August Cross, M. D., Professor in Transylvania University, &c. Lexington: 1838.*

Dr. Cross has given a complete history of this disease, which of course differs but little from those already published. The most novel points of his essay are the stress which he lays upon the lesion occurring in the bronchial mucous membrane, during the course of the disease. This lesion is the congestion of the bronchial mucous membrane. Dr. Cross ascribes to this secondary condition, the functional alterations of the nervous system, which are so striking in severe, or, as they are often termed, malignant cases of scarlatina.

In these cases, he states, that the fever, from having been inflammatory, "will become decidedly typhoid, and patients, in general, will sink with great rapidity into a hopeless state of debility, under the depressing influence of an imperfectly arterialized blood. That this should result from the pathological condition of the bronchial mucous membrane, to which reference has been made, must be perfectly apparent to those the least acquainted with the physiological relations of the functions of respiration with the rest of the system." We certainly agree with Dr. Cross, that

* We received this paper some months since, and at that time, designed giving an early notice of it. From accidental causes, this was not done, and we are glad to have an opportunity of repairing this omission.

a congested state of the bronchial mucous membrane is frequent in scarlatina, but we by no means think that this congestion is the cause of the cerebral and nervous symptoms. On the contrary, we are much more disposed to regard the affection of the pulmonary organs as produced in part by the alteration of the nervous system which always takes place in severe forms of the disease, and, in part, by the general fulness, and excitement of the capillary circulation.

We have deduced conclusive proof of this fact from pathological anatomy. In the first place, we have ascertained, by strict observation, that the congestion of the bronchial mucous membrane in scarlatina is not nearly so evident as it is in measles or pneumonia, both of which diseases are much less frequently "typhoid" in their character than scarlatina. We are quite sure that a similar error is often made, in speaking with reference both to scarlatina and to measles, and that the congestion which is often observed in the bronchial mucous membrane, is by no means proportioned to the malignant character of the affection.

In the treatment, Dr. Cross relies almost entirely on emetics. These, he thinks, will be sufficient to prevent the congestion of the inflammation of the bronchial mucous membrane, or to remove it after it has occurred. Dr. Cross does not, we think, lay too much stress on emetics when he regards them as the best means of obviating the pulmonary congestion, but we must decidedly object to the almost unqualified terms in which he insists upon the necessity of frequent repetition of emetics whenever the wheezing noise should be heard in respiration, as often as three or four, or half-a-dozen times, or even more, in the twenty-four hours. The particular epidemic in which Dr. Cross found that emetics were beneficial, may not again occur with the same characters; for, in no disease do epidemics differ more completely than those of scarlatina. We fear that he may have committed an error in generalizing too widely, and in recommending a mode which is certainly not exempt from danger. If ipecacuanha only be used, the danger is not a little diminished, but it still exists, and we should always be cautious in the use of these remedies. The other remedies commonly used in the management of scarlatina, are mentioned by Dr. Cross. He estimates their value, in a spirit of impartial discussion, and very properly condemns the use of blisters and of blood-letting, when the nervous system is evidently in an irritable condition. Of these remedies, cold and warm affusion and applications to the skin, are, of course, amongst the most important.

Practical Surgery. By ROBERT LISTON, Surgeon. *With Notes and Additional Illustrations.* By GEORGE W. NORRIS, M. D., *one of the Surgeons of the Pennsylvania Hospital.* Philadelphia, 1838. 8vo., pp. 374.

Liston's Practical Surgery has been for some time before the profession, both of Great Britain and our own country. The London edition was published in 1837, and was noticed in an early number of the first volume of the Examiner. It has been presented to the American reader during the current year, in the American Medical Library, with notes and additions, by Dr. Norris; and a separate edition of the same has since been issued. We have before expressed the opinion, that the work of Mr. Liston is an excellent manual of practical surgery. To the American surgeon, the annotations and additions of Dr. Norris are of much value; upon the author, they are a not unmerited reflection. Dr. Norris has annexed to his edition the improvements in operative surgery, by American surgeons, which Mr. Liston has done himself and his British readers the injustice to pass by unnoticed. The editor has also incorporated with the work, the details of several interesting cases, drawn from his experience in the Pennsylvania Hospital, which illustrate some interesting surgical points. He has, moreover, favoured us with an outline of the practice in that institution, in some important affections. This is particularly the case with the subject of fractures. These injuries are treated with marked success in Dr. Norris's hospital, and he has given the routine of the practice employed, in the cases which offer any important peculiarities.

In noticing the modification of Desault's apparatus for the treatment of fractured thighs, in use in the Pennsylvania Hospital, Dr. Norris has inadvertently given Dr. Physick credit for all the improvements there adopted. The suggestion of the block at the lower end of the outer splint, which accomplishes extension in the line of the axis of the limb, originated, we believe, with Dr. Hutchinson, a surgeon of much promise, who was cut off early in his career. He is entitled to the merit of this important improvement in manipulative surgery.

THE MEDICAL EXAMINER.

PHILADELPHIA, MARCH 2, 1839.

A BILL is now before the Legislature of Pennsylvania, for the incorporation of a College of Physicians. It is proposed that the college shall have the power of granting degrees in medicine to candidates who may pass an examination upon such departments of science as are necessary for a physician, and who shall have pursued the course of study which may be directed by the college.

The proposed institution is to be very extended, and includes a very large number of physicians of Philadelphia; it differs from other associations of the kind, in one essential respect. The examiners are a board, appointed by the college, who do not teach; their interest is in no manner connected with the number of students who receive diplomas, for it is expressly understood that the fees which they may receive, are to be paid for the trouble and time which the examinations require, and are not to be refunded in case the candidate should be rejected. In other words, the ordinary mode of professional remuneration, founded upon the principle that the time of a physician is of value to him, is to be adopted. The lecturers and teachers are not to be selected from any body of men, nor need they belong to any one institution; all that is required is simply to produce to the college evidence that they really teach what they announce, and comply with the terms of their prospectus.

The student may, therefore, pursue his studies where he likes, and if he has reason to believe that he can gain more instruction from one teacher than from another, he may attend his class, and may not feel himself obliged to pursue the entire course of instruction required in the school to which the lecturer happens to be attached.

It is very plain, that if this system should be found practically to work well, it would obviate many of the disadvantages which are inherent in all institutions in which the teachers are the judges of the qualifications necessary for a degree; while, at the same time, it would in no wise interfere with the established schools. For in all cases, a school already established has a vantage ground, which, if well-conducted, it cannot be deprived of. This peculiarity of the new plan is one of its best features. We dislike the needless multiplication of schools, and we do not consider it just, that the exclusive privilege of granting degrees should be conferred upon any institution which may possess influence enough to obtain a charter. By the proposed system, the number of schools, that is, of associations of teachers, will be regulated by the usual laws of supply and demand, and physicians will very soon discover, that if a school which they form is not required, it will prove both a profitless and expensive undertaking. At the same time, a body of men or single individuals, who may possess the qualifications necessary for teachers, can always claim the right of bringing forward their pupils as candidates for examination, and will, therefore, be enabled to teach under conditions only a little less advantageous than those which are offered by established schools. The only important point of difference, is simply, the hold which older institutions have already obtained upon the affections of the public; this is a legitimate advantage, and one which we should regret to see endangered.

A plan similar to that which is now proposed, is obviously so much in harmony with the institutions of this country, that sooner or later it will undoubtedly be adopted. When nothing is asked of the government, except the authority permitting a body of competent individuals to grant an official certificate of the qualifications of pupils who may present themselves for examination, it will scarcely seem just to refuse the request. Concentration in a single school, or in a small number of schools, is impracticable in this country; and it is almost always found that new institutions succeed in obtaining separate charters; but the proposed bill may rather tend to diminish the number of future associations, and give greater scope to individual exertions.

In these remarks we have no allusion to existing schools. On the contrary, although we shall always remain untramelled as editors, we have our individual attachments; and our editorial efforts will be directed to uphold, and not to aid in breaking down, any institution which may gain for itself a desirable position, by the industry and ability of its teachers. We should advocate the proposed bill as one which seems well fitted to allay the heart-burnings and discontents of those who fancy themselves excluded from a legitimate career, while facilities will certainly be offered for instructers who may be well fitted for their task.

Much to the honour of the schools at Philadelphia, we understand that no objections are

brought forward by their professors to a measure which, in all probability, will be, in the end, a means of increasing their usefulness and of strengthening their actual position.

CLINICAL LECTURES.

PHILADELPHIA HOSPITAL.

Saturday, February 16th.—Dr. HORNER remarked:

GENTLEMEN,—In the first case which I shall introduce to day, you will recognise the woman with torpid nervous deafness, the permeability of whose Eustachian tube I tested at our last meeting with the air-douche. This operation you may remember was followed by emphysema of the pharynx, and of the face in the region of the parotid gland. As the patient had previously suffered from paralysis, and I was somewhat afraid that spasm of the glottis might occur, I ordered her to be bled to six or eight ounces. This was immediately done; no bad consequences followed the emphysema, which is now well, after making the throat uneasy for two or three days. We have since then tried the effect of the introduction of etherous vapour into the tympanal cavity. As yet there has been no amelioration, but sufficient time has not elapsed to test fully the power of this remedy. Should the treatment according to Mr. Kramer's plan, be diligently pursued for a month, I have no doubt that she will be benefited. I shall next introduce a coloured man, affected with phymosis, upon whom I propose to operate. Dr. Gibson, in the early part of the course treated so fully of this subject, that I shall not now detain you with any special account of the disease. There are, as you are aware, two modes of operating—by excision—and by slitting up the prepuce. Where the prepuce is very long the former is to be preferred. By simply slitting it open, we curtail the period of cure as well as the size of the cicatrix. I shall in the case before you operate in this way. I shall pass a director between the prepuce and the glans, and introducing a curved sharp pointed bistoury, plunge the point through the base of the prepuce and cut forwards. By this simple line of incision, the operation is secured from any interruption on the part of the patient, because should he recoil, the knife will cut the faster; moreover, a regular edge is obtained for the two laminæ of the prepuce, which should be fixed after the incision, by a stitch. [Operation done accordingly.] By cutting from before backwards, the operation is exposed to disturbance from the patient, and the risk of an irregular edge is thereby encountered. Another mode of operating recommended by Mr. Colles,* consists in making a slit near the side of the frænum. There are cases in which this is no doubt a preferable operation.

Before I dismiss this patient it will be as well for you to examine him, as he presents a remarkably good specimen of *Cataract* in the right eye. The opacity which you see on looking at his eye, might be confounded on a superficial examination with opacity of the cornea. On closer inspection, it will, however, be found posterior to the iris. He is enabled to see somewhat indistinctly at times; this takes place when the luminous rays strike the side of the cornea, and penetrate to the retina by this way. The pupil is enormously dilated, as much so as if it were produced by stramonium or belladonna. The left eye is as you see perfectly good. The rule of conduct among surgeons in such cases, is not as yet definitely settled, with respect to an operation. The general practice where one eye only is involved, is to let it alone. Now were we to operate, the focal distance in the two eyes would be different; the right eye would, therefore, as the weakest, be thrown out of the natural axis of vision. Besides, from the very lively sympathy which exists between the eyes, there is a possibility that the sound eye might become inflamed, and serious inconvenience result. If, unfortunately, any accident should happen to the left eye, then it would be proper to perform an operation, but so long as the vision of one eye remains unimpaired, nothing would be gained by it, and injury might result.

The next patient I show you, is one whom, from appearances, I should pronounce to have *Fistula lachrymalis*. I have not yet tested its existence; this I propose to do now before you. That little tumour which you see near the internal canthus of the eye, approximates the situation of such a one as attends fistula lachrymalis; but it is somewhat unusually advanced on the side of the root of the nose; also the patient is under the influence of secondary syphilis. This man, evidently, has a watery eye. He can give, in other respects, no very accurate or satisfactory account of his disease. Whenever you see that weeping at the inner canthus, accompanied with a discharge of serum and pus, you may doubt the permeability of the lachrymal passages. I will now inject tepid water through the lower punctum lachrymale. You see, no water flows from the nose, but it returns by the upper punctum and the tumour. This case is thus satisfactorily made out as fistula lachrymalis. I shall operate upon it at our next meeting. Before I send him out, I will show you his arm, which, you see, is much swollen, and read to you a history of his case, as one of syphilis.

[This was done.]

I shall, gentlemen, conclude this lecture with some remarks on *Frost-bite* or *Congelation*. The sensation of cold is relative, and depends on the degree of temperature to which we are accustomed, and the state of the body previous to its application. The media through which heat is abstracted from the body also exercise an influence, as well as the constitutional energy of the individual exposed to its loss, and the condition he may be in at the time, whether in health

* Practical Observations on Veneral Disease, p. 92, Dublin, 1837.

or disease. The phenomena of cold as shown in the human body, are very various, and are modified by the constitutional peculiarities and the age of the individual. Plethoric persons of robust frame, resist the effects of cold much better than those of a feeble, weakly habit. The extremes of youth and age, suffer also very much. The annual mortality of the children at the Hopital des Enfans Trouvès in Paris is enormous.

Local congelation is most apt to take place in parts furthest removed from the centre of the circulation. Dry cold acts less powerfully than humid, which has superadded to the direct agent cold air, the additional abstraction of heat by evaporation. According to Baron Larrey, whose opportunities of witnessing the influence of cold during the retreat of the French army from Moscow, were very great, the bad effects of cold are generally manifested on the occurrence of a thaw.

The first effect of the application of cold is a paleness of the surface, with diminution of volume, corrugation, and a disagreeable pricking sensation. The next effect is redness, with a slight tumefaction, and then a bluish tint, with pungent pain in the part. The texture now becomes soft, flexible, and shining, and assumes a slate colour, owing to the arrest of blood in it, feeling to the touch much colder than it really is, owing to its impaired vitality. In severe cases, complete insensibility and incapability of motion attend it. Where there is a very low temperature, as in northern climates, when its action is assisted by a high wind, instead of all these preparatory admonitions, the part exposed becomes suddenly marbled and insensible, or changes its colour to a dull, waxy whiteness, and becomes congealed, before the individual is apprised of what has happened. Many soldiers in the French army, during the disastrous retreat from Russia, suffered in this way. A frozen state is not absolutely a dead one, for after parts have become stiff and insensible for some hours, their vitality may be re-established. Parts which have remained for several days in a state of complete insensibility and want of myotility, have been eventually restored to their functions without being attacked with gangrene. Hence it may be inferred that the destructive influence of cold is less the result of itself than of the subsequent changes or reaction. When heat is suddenly applied, an intolerable tingling and prickling are manifested; the part tumefies, a sharp, biting heat is developed, and the pain is so intense sometimes, as to extort cries of distress. In slight cases, these phenomena disappear, but in the severer ones, the reaction being more aggravated, a vesication of the epidermis in plyctenæ follows, the spots being surrounded by a red, erysipelatous circle. In the latter respect, the analogy between a burn and a congelation is so great, that, by mere inspection, you would not be enabled to distinguish between them. The skin under these phlyctenæ becomes livid, insensible, and discoloured. In the worst cases, the vesications do not form, but there is an immediate appearance of grayish brown or black scars, which end in the sphacelation of all the part affected. In the treatment of a person who has been laboring under the influence of cold for any time, you must be particularly careful not to bring him suddenly into a heated apartment. He must first be rubbed with snow, or water mixed with pounded ice, and all your efforts must be directed to a *gradual* restoration of warmth.

Old persons, women, children, and individuals of a lymphatic temperament, are very liable to chilblains or pernio. This affection, commonly known as frost bite, is characterized by a circumscribed elevated red spot of the integuments, attended with a disagreeable heat, and a very inconvenient itching, and it runs, sometimes, into ulceration. The best applications in such cases are the terebinthinates. Some persons have recommended emollient applications, but these almost always aggravate the disease.

Cases of Congelation from Cold.

Case I.—George Blubeley, aged thirty-two, entered the surgical ward January 4th, 1839; is an Englishman; nine years in America; works at weaving. On new year's day he walked about the city all the afternoon; it had commenced thawing in the middle of the day, so as to render the gutters deep; he accidentally slipped into one, thereby wetting his feet; was not intoxicated—never drinks to excess; he continued abroad until 10 o'clock; felt no sensation of chill in his feet until after sunset, when the weather became extremely cold. Upon arriving at home, his feet were very much benumbed and stiff, and his shoes and stockings were frozen fast; he was obliged to *thaw* them before they could be removed. His feet now looked a little red, but nearly natural; slept well that night. On morning of January 2d, they presented a bruised appearance, somewhat swollen. He now applied an Indian meal poultice; thought it afforded no relief, and substituted oil of turpentine; this blistered his feet, which now felt hot and cold alternately. Upon his entrance, January 4th, he had some stimulating liniment. Next day, the unguent. stramonii was substituted; at this time the nails remained, with no appearance of sphacelus; this treatment was continued until the 7th, when ulceration, with a disposition to sloughing being evident, the ungt. plumb. acet. was added to the stramonium, and continued during the day—poultices were applied at night.

Case II.—Thomas Lester, aged fifty, entered surgical ward, January 8th, 1839. Born in England; in America nine years; is a weaver by trade; habits moderate; general health good. Two weeks before entrance, returned from England; landed at New York, and came to Philadelphia in the rail-road cars; the weather was clear, but cold. He walked about the city for several days, in his usual health. On the night of Sunday, December 29th, he felt severe pain in his right foot, which prevented his sleeping; it became very red and swollen, extending up the

leg. Next day soaked his feet in bran water, without relief; the limb continuing painful, he procured some hartshorn, laudanum, and oil, and rubbed the part. After its application, the pain left the limb, but continued in the foot, which, at this time, had a dark bluish appearance, and was much puffed up. Upon his entrance, January 8th, the same appearance remained, and there was evident fluctuation of the tumefied portion, which was greatest over the metatarsal bones; he was ordered catap. ferment., with good diet, &c. This was continued until the night of the third day after, when the tumour broke, followed by a profuse discharge of bloody serum. The poultices were still applied; the skin surrounding the aperture sloughed, leaving an ulcer of tolerably healthy appearance, about three by four inches in size; this healed rapidly under the poultice—the exuberant granulations being kept down by a solution of sulph. cupri.

Case III.—John Underwood, (black,) aged 29; entered Jan. 29, 1839; born in Philadelphia; works *along shore*, as a stevedore; habits moderate. On Wednesday, Jan. 23d, a few days after the severe storm, was at work unloading a brig—worked six hours among ice and snow—before stopping work felt pain in hands extending to elbows—also in feet which were benumbed—slept none that night—hands and feet becoming swollen, he applied "scraped potatoes and beef's gall"—was somewhat easier afterwards He remained in this state until Jan. 29th, when he entered the Hospital. At the time of entrance his limbs were still swollen, with considerable increase of temperature—but the skin remained unbroken—they were then wrapped in raw cotton, which as he says "drew some and increased the heat;" it was kept on for several days—the symptoms gradually abated. Four days after entrance his feet were well—and now, Feb. 7th, all uneasy sensations have abated, except in two fingers of left hand, which are still somewhat stiff and swollen, with a peculiar hardness to the touch; there is also a dark hue beneath the nails; other changes in color not being apparent, from patient's complexion.

Case IV.—Benjamin Fisher, (black,) aged 23 years; entered Jan. 21st, 1839; born in Pennsylvania; drinks a good deal, at times getting intoxicated. Two weeks before entrance engaged carrying grain from the wharf into a store; worked all day during a snow storm; his shoes 'leaked' so that his feet were soon wet; at night his feet were painful and swollen; he could still however walk about—did nothing for them. Two weeks after he hurt his left knee, which had been formerly strained by a fall from a sleigh; on this account he entered the Hospital. At entrance his feet were still painful; they were wrapped in raw cotton, and in two days pain had subsided, and they now continue well. Patient remains on account of his knee.

Dr. Carswell succeeds Dr. Elliotson in the University College Hospital.

CLINICAL REPORTS.

Report of six cases of fracture of the lower extremity, treated in the Surgical Wards of the Pennsylvania Hospital, after the method of Suetin and Velpeau. Dr. T. Harris, Attending Surgeon.

[Reported by H. H. Smith, M. D., Resident Surgeon.]

In numbers twenty-one and twenty-three, of the Examiner for 1838, there appeared two articles on the Appareil Immobile, and its modifications in the treatment of fractures; as used by Suetin and Velpeau. As the advantages to be derived from this plan were very great, and as a large number of cases of this injury were constantly admitted into the Hospital, an early opportunity was sought for its application. The success of the first case was such as to cause its repetition in five others, all of which have done well and have gone far to prove its convenience to the patient, and its utility as a dressing for this very common class of accidents. The six cases, hereinafter reported, comprehend most of the patients labouring under this injury, who have been admitted since January, the only ones in which it has not been used being those which were deemed unfit, from the severe contusion of the limb consequent on the cause of fracture.

Case First.—*Fracture of both bones of the leg—Application of the apparatus seven days after the accident—Cure without deformity.*

George R——, æt. 34 years, a shoemaker by trade, and of temperate habits, was admitted into the Hospital, Dec. 25th 1838, with a fracture of the tibia, oblique at its lower third, and one of the fibula at its upper third caused by a fall upon the ice. The limb at first was placed in the fracture box, and evaporating lotions were used to reduce the inflammation, which was considerable. On the third of January, seven days after the accident, the immovable apparatus was applied in the following manner. A *washed* roller was smoothly applied, from the toes to the knee, cotton being placed along the spine of the tibia to prevent excoriation from the turns of the bandage, and also in the cavity, on each side of the tendo-achilles. This was well rubbed over with starch, made thick and smooth by being boiled for twenty minutes. A second roller was then applied from the knee down and also well covered with starch. Two pieces of binder's board cut to fit the sides of the leg and extend from below the knee to below the malleoli, were soaked in water until soft. They were then rubbed with starch, and applied to the leg over this, so as to surround it, except for the breadth of a finger on the front and back; small cuts being made at the lower end to cause it to fit the projection of the malleoli, and also at any other point where it bulged out. A third splint, made to fit the foot, and slit at the end so as to enable it to turn up behind the heel, was then applied to the foot, starched and secured by a third roller from the toes up. This was coated in like manner—a fourth applied over all, and the dressing com-

pleted by starch, which kept the whole smooth and tight without the aid of pins.

The limb was now laid carefully in an *empty* fracture box, a little cotton placed under the heel, and the foot tied to the foot board, where it was allowed to remain for four days, at the expiration of which period the whole was dry and hard, the limb being cased as firmly as in plaster.

The patient was then allowed to remain in bed without any other dressing except the splints; and on the ninth of January, thirteen days after the injury, a bandage was doubled around his neck, carried down behind the calf of the leg, then in front of the ankle, over the instep, and round under the foot to the instep again so as to form a sling to raise the foot a little from the ground and he was allowed to walk about with crutches. In this way he continued until February 7th, when the apparatus was taken off, before the class, the limb being perfectly straight and firm, and without the slightest deformity; and on the 13th of February, seven weeks after the injury, the man was discharged. In this instance, the apparatus was not touched until the fourth week, when a simple roller was applied to tighten it, owing to looseness consequent on the shrinking of the muscles. One of the objections raised to the use of the apparatus was thus readily obviated without injury to the patient; for, as the splints did not meet before and behind the leg, it was easy to fold the surplus bandage in, without causing any welt on the skin, while the bandage, having been previously washed, shrunk but little.

CASE SECOND.—*Fracture of the fibula two inches above the joint—Application of the apparatus seventeen days after the injury—Cure without deformity.*

Patrick D——, æt. 42 years, a labourer, fell off a step on the 15th of January, and fractured his fibula obliquely, two inches above the external malleolus. Owing to the inflammation, leeches, and the antiphlogistic course, with the use of the fracture box, were continued until February 1st, seventeen days after the accident, when the apparatus was applied as in the preceding case; except that the splints were continued under the bottom of the foot, being slit up so that the fold under the foot did not interfere with the application of the splint to the sole, thus preventing all motion at the ankle joint. After the apparatus had been dried in the fracture box, with the foot *well turned in*, for five days, the patient was allowed to walk about, and on the 10th of February, twenty six days after the accident, he walked up to the third story of the house, and was operated on by Dr. Harris for cataract. On February 21st, the apparatus was removed—there being not the least deformity perceptible even to the touch.

CASE THIRD.—*Oblique fracture of both bones of the leg—Application of the apparatus nine days after the accident—Cured.*

Patrick C——, æt. 23 years, a laborer, whilst working on a rail road on the 18th of January, was knocked down by the caving in of a bank of earth, and both bones of his leg were broken obliquely, near the middle. He was treated in the usual way by the fracture box, until the 27th of January, when the starch dressing was applied. January 31st, four days afterwards, was allowed to rise and walk, by degrees, more each day, until February 25th, thirty eight days after the accident, when the apparatus was removed. The limb was perfectly straight without any motion between the bones, and strong enough to allow him to walk upon it, but reduced from a large size to nearly nothing, by the pressure and perfect rest. In this instance, the apparatus was not touched until the sixth day after its application, when on his complaining of its tightness over the instep, the foot was soaked for a few minutes in hot water, and, by introducing a spatula under the bandage, it was raised sufficiently to free the point of pain. Being then allowed to harden, he suffered no inconvenience afterwards.

The next three cases were of fractures of the thigh, in which, as there was but the one bone to act on, and other objects to be considered than the mere apposition of the fractured ends, it was applied at first, on a more advanced stage.

CASE FOURTH.—*Oblique fracture of the middle of the femur—Application of the apparatus fifty-three days after the accident—Cure without deformity.*

Francis McG——, æt. 22 years, of good habits, fell on the 22d of November, down the hatchway of a vessel and fractured his clavicle and femur. The clavicle was dressed with the usual apparatus, and the femur treated by the long fracture box, fastened on the double inclined plane, until January 14th, fifty-three days after the injury, when the union not being firm, although there was considerable bony deposition, the apparatus was applied as follows:—A roller was carried smoothly up from below the knee to the groin, the limb being held up and extended by assistants; starched as in the first case, and covered by a second roller. A long splint of binder's board was then applied, from the tuberosity of the ischium to below the knee, or the back part of the thigh, and another from the groin to the patella, in front—so as to surround the limb entirely, except for the space mentioned in the dressing of the leg. These were then covered in the same manner as the splints in the first case, and a simple roller applied from the toes up to the lower part of the starch, so that it could be renewed at pleasure. The limb was laid on a simple inclined plane, until the apparatus dried. Five days were necessary to dry it, and the man was then allowed to walk about, the limb being supported by the sling before mentioned, the splint behind preventing all flexion at the knee. On the 2d of February, about ten weeks after the accident, the apparatus was removed, without there being found any deformity or perceptible shortening, the measurement showed it to be a little more than a quarter

of an inch less than the sound limb, and on the 7th of February, the patient left the hospital.

CASES FIFTH and SIXTH.—*Oblique fracture of the upper third of the femur—Application of the apparatus thirty days after the injury—Perfect cure.*

Thomas H ——, æt. 26, a labourer, fractured his thigh at its upper third, December 6th, about fifty miles from town. He was dressed in the neighbourhood, and did not arrive at the hospital, till the third day after the accident, owing to the destruction of part of the rail road. The limb was much inflamed and swollen, and was treated at first by the inclined fracture box, lotions, &c., until January 6th, when the apparatus was applied to it, and dried in the same manner as in the preceding case. On the 14th of January, the man was allowed to walk about, and the apparatus remained untouched, till its removal, February 12th, there being perfect union, and only one-eighth of an inch shortening by close measurement, and none perceptible in his gait; and on the 21st of February, eleven weeks after the injury, he was discharged.

The same apparatus was applied to Patrick E——, (who was admitted February 6th, with an oblique fracture, caused by blasting,) on the 19th of February, thirteen days after the accident, and enabled him to sit up in bed five days afterwards, and on February 25th, to walk the length of the room. On his standing up, he feels too weak to walk readily, but has every prospect of doing so shortly. At present, he complains of no inconvenience from the dressing, and is able to turn about in his bed; the limb being but little shortened by measurement over the splints. The termination of the case will be reported hereafter.

The advantages to be derived from an apparatus of the kind described, are too evident to need enumeration. In the case of fractures of the leg, it enables the patient to move about in fifteen days, with perfect safety. It has not been deemed expedient to apply it so early as M. Velpeau has done, owing to the severe contusions which complicate most of the fractures received here; but, with this restriction it might, as far as the experience of these cases prove, be used in all simple fractures, as few will be found, in private practice, more severe than those on which it has been tried. In respect to fractures of the thigh, the application cannot be made quite so early, as the contractile power of the muscles ought previously to be overcome by some apparatus for making extension. After this, however, the bandage prevents this action, and the weight of the limb in the erect posture, prevents shortening. In hospital practice, it also promises to be of great utility, by doing away the risk of sloughs on the sacrum, from the constant pressure consequent on the long confinement on the back, and adds very materially to the patient's comfort, by allowing him to rise to a window, or to go from one apartment to another. In case second, it enabled a man to rise and undergo an operation for cataract, in a place where the light was better than in his own room. In the last case reported, sufficient time has not elapsed, to prove the success of the dressing, when applied *early* in cases of fracture of the thigh; but should it succeed, as there is at present every prospect of its doing, it will remedy what has lately proved a great objection to the old method of treatment, namely, sloughing of the heel and its terrible consequences.

FOREIGN SUMMARY.

Musk and Gum Ammoniac in Tympanitis.—Dr. Tradini recommends highly a combination of moschus et gum. ammoniac. in tympanitis in the following proportion:

Mosch. gr. iij.
Gum. ammon. gr. xii.

M. Fiant pilulæ tres. D. P. Take one pill morning, noon, and evening.

The remedy is most proper where there is much weakness and debility, which generally accompany the above disease. (Il filiatre sebazio.)

Moxæ and caustics applied on the head in hydrocephalus acutus in children.

Against the above disease, Dr. Constant, in Paris, (*Bullet. de Therapeutique, Med. et. Chir.*,) recommends, particularly, moxæ applied on the head, on each side of the sutura sagittalis, and assures us, that he has by this treatment been able to save several children. Dr. Dürr, in Hall, in Wurtemburg, who has lately written on this disease, has derived great benefit from the use of caustics in this disease. (*Frorieps Notiz.*, No. 1021, Feb., 1836.) He shaves the head, where the sutura sagittalis and lambdoidea come together, and puts on a small emplastrum, about as large as an American dollar, (silver dollar,) spread thinly with the following unguent:

Ungu. acris Autenriethi ʒj.
Tartar. emetic.
Ungu. canthar. $\overline{aa}$ ʒss.

After four or six hours the skin is raised without there having been any considerable pain. The plaster is spread again, and when, after six or twelve hours, he observes water, he makes an incision, lets the water run out, and applies, every twelve hours, an ointment made up from

Ungu. basilic.
Emplast. de minio $\overline{aa}$.

After twenty-four hours, you will have produced an artificial, good looking ulcer. In cases where the suppuration is not great, or seems to cease, Dr. Dürr applies a combination of both the above ointments.—*Bibliothec. for Læger, Copenhagen.*

Remarks on, with Case of, Pneumo-thorax.—The following case lately occurred in the practice of M. Chomel, at the Hôtel Dieu.

A man, affected with pulmonary tubercles in a state of softening, was suddenly seized with a violent pleuritic pain or stitch, which caused extreme difficulty in breathing, and considerable febrile action in the whole system.

On examining the chest, it was observed to be

altogether fuller and more capacious than it had been, and at the same time, to be much more resonant on percussion, while the respiratory murmur had become much more indistinct.

When lecturing upon this case, M. Chomel took occasion to state that, in his opinion, the disease of *pneumo-thorax* is never idiopathic,—or, in other words, that air is never secreted from the pleural surfaces—but is always the result of a communication between the air cells of the lungs and the bag of the pleura. Such a communication may take place in one of two ways; either by the ulceration of a vomica outwards, as in the present case, or in consequence of a purulent effusion in the pleural cavity being followed by an ulceration at some point of the lungs.

He stated, at the same time, that he took the same view of tympanites abdominalis—the effusion of air being, according to him, always the result of an intestinal perforation.

Such a perforation may have taken place either from within outwards, as is occasionally the case in some cases of typhus fever, or from without inwards, as now and then happens in consequence of a purulent collection in the abdominal cavity. An instance of this sort occurred very recently in M. Chomel's clinique, in a woman, who died from an immense abscess in the pelvis: ulceration had taken place at one point of the large intestine, and had penetrated through all its coats, except the mucous one.

It is necessary to distinguish the peritoneal tympanites, which we not unfrequently meet with in dissection, when there is certainly no perforation of the intestines, from that *alleged* or *presumed form* of the disease, which has been attributed to the secretion of air during life: it is entirely owing to the incipient cadaveric decomposition. M. Chomel mentioned a very remarkable instance of this cadaveric tympanites, which he recently met with. A restaurateur in Paris, who was immensely fat, but seemed to be in very good health, was most unexpectedly found dead in his bed. The body was examined thirty hours after death. The season was summer. No sooner were the abdominal parietes divided, than a loud explosion, which M. Chomel compares to that produced by the discharge of an air-gun, was heard; so violent was the rush of the confined air from the aperture which had been made into the cavity of the abdomen.

But now to return to our case of pneumo-thorax.

On the following day, after the presumed rupture of the vomica, and the communication between the air cells of the lungs and the pleural cavity had taken place, the expansion and also the resonance of the thoracic parietes were found to have considerably increased.

In proportion, as the pneumo-thorax was more decided, the auscultatory signs became more and more distinct and decisive. At the lower part of the chest, a sound, analogous to the amphoric bruit, was perceptible; and more externally, a distinct metallic tinckling was to be heard. Over the scapular region, a *bruit de secousse*, such as is caused by striking a drum with the finger, was audible when the patient spoke.

Along with these symptoms, there was extreme anxiety and difficulty of breathing, amounting to orthopnœa, &c., and, as we have mentioned above, the chest was remarkably resonant on percussion.

The treatment which M. Chomel adopts in almost all cases of internal perforation, whether of the thoracic or of the abdominal viscera, consists in the exhibition of opiates, until they produce a decided narcotism of the system. The object is not only to quiet the pain which is almost always present, but also to bring on a state of *inertia* of the whole system, so as to permit nature to exercise her own medicative and reparatory efforts.

From the results of several cases of presumed intestinal perforation, this treatment certainly seems to be by far the most advisable.—*Med. Chirur. Rev. for January, from Lançette Française.*

Poisoning by Arsenic—Exhumation of the Body, and Conviction of the Criminal, three years after death.—The following case may be added to those reported by M. Orfila and others, where the assistance of chemistry has most strikingly led to the detection of crime, many months and even years after its perpetration.

A widow woman, by name Lamothe, had, in November, 1833, mentioned to several of her acquaintances that a Madame Chevalier had made her universal legatee, and that she hoped she might be soon in possession of her property, as her friend "ne pouvait pas vivre longtemps." It was not long after the date of this foolish speech that Madame Chevalier did in truth die, after a severe attack of cholic, accompanied with most distressing vomiting.

Public rumour, at the time, accused Lamothe of having committed murder; but it does not seem that it ever reached the ear of the public authorities.

Three years afterwards, the house adjoining to that of Lamothe took fire; and the inhabitants of the village, having never forgotten the tale of Madame Chevalier's death, did not hesitate to accuse her (Lamothe) now of wilful arson.

The magistrates, hearing of these reports, determined to investigate the matter minutely. It was ascertained that Lamothe had some arsenic in her possession at the time of Madame Chevalier's death. They ordered the body to be immediately disinterred, three years exactly having intervened since the period of her death.

The soil of the burying-ground being remarkably dry, the body was found not so much decomposed as might have been expected. It was forthwith sent off to Paris, to be examined, pathologically and chemically, by Drs. Barruel, Henry and Olivier, three distinguished men of science in the metropolis. On examining the trunk, it was found completely dry, mummyfied, and almost inodorous; the abdominal parietes, although much shrivelled, were entire. On re-

moving these, there seemed to be no vestiges of the viscera, in consequence of the extreme desiccation which had taken place. On examining, however, the parts more attentively, the intestines were found to be reduced to the state of mere membranous laminæ, adhering to each other, and to the spine and edges of the pelvis. In the interstices of these membranous *folia*, a brownish coloured pulverulent matter was observed. All the viscera, parenchymatous, such as the liver and spleen, as well as the fleshy and membranous as the uterus and intestines, had become blended together, just as now described.

At one spot only, on the upper two lumbar vertebræ, there was a small portion of a brown substance, waxy in consistence, which was probably a portion of the liver. After these short details, it is unnecessary to add that it was not possible to distinguish the abdominal viscera, one from another.

A small fragment of the diaphragm, on the right side, still remained. The only vestige of the lungs was a brown friable substance, in irregular nodules, and the heart was converted into a hard, black, and fragile mass, resting on the vertebræ.

The entire contents of the abdominal cavity—if such it can be called—were now carefully scraped from the bones of the spine and pelvis, and collected together, the earthly granular matter being separated from the foliaceous or membranous substance.

The earthy matter was first examined. A portion was boiled in distilled water, acidulated with a small quantity of pure hydrochloric acid.

On cooling, the liquor was filtered. A small quantity of brown deposit was collected on the blotting-paper, and the filtered liquor was of the same colour.

Through a portion of the latter, diluted with water, a stream of pure sulphuretted hydrogen gas was caused to pass for the space of two hours. This gave rise to a light brownish precipitate, which was carefully collected and tested. It gave no traces of any metallic sulphuret, and was found to contain nothing but minute portions of chloruret of sodium, phosphate of lime, and oxide of iron—the usual salts of animal substances.

The deposit on the filtering paper was then dried and calcined in a crucible; the residue was then examined, and found to contain only the salts now mentioned, and to give no signs of metallic sulphuret. Hitherto, therefore, nothing had been detected to lead to any suspicion of poisoning.

The shrivelled viscera were now subjected to a most careful examination. They were first macerated in rectified alcohol for forty-eight hours, and then withdrawn. The spirit, which had acquired a greenish brown colour, was filtered and distilled in a glass retort. The residue was concentrated in a water-bath to the consistence of a soft extract, and then treated with slightly acidulated water, and boiled. Ammonia was added to neutralize the acid; and then a stream of sulphuretted hydrogen was passed through the fluid for a length of time. A deep-brown precipitate was formed in consequence. This was carefully collected on filtering paper; and the strained liquor was evaporated to dryness, until a dark brown residue was obtained. On burning a small portion of this on live coals, an empyreumatic animal odour, followed by one resembling garlic, was perceived.

Another portion was then heated strongly with hydrochloric acid, until all the brown matter had disappeared; and the dry product of this treatment. being first neutralized, gave a bright-red precipitate with nitrate of silver, similar to that afforded by the action of this salt on any of the preparations of arsenic.

There were, therefore, strong suspicions that arsenic would be discovered in the precipitated matter collected on the filter.

It is unnecessary to particularise the experiments both in the *dry* and in the *wet* method, which were performed. Suffice it to say, that they proved beyond all doubt the existence of this poison. The commissioners sent to the public authorities, along with their report, specimens of—1, arsenic reduced to a metallic state; 2, arseniate of silver; and 3, sulphuret of arsenic floating in water.

The Court of Assizes at once pronounced judgment against the woman Lamothe, and condemned her to perpetual imprisonment. This took place on the 17th of March, 1837—three years and a half after the death of Madame Chevalier.

In closing this brief report, it only remains to add that the experiments necessary in such a case as the preceding, require the most patient and protracted care and delicacy. A week, at least, is not too long for such an investigation.—*Ib. from Annales d'Hygiene, &c.*

New Theory and Treatment of Erysipelas. By M. Blandin, Surgeon to the Hôtel Dieu, Paris.—Erysipelas may be divided into two varieties, according to the causes which give rise to it. These may be either external or internal; as a wound or injury, or a disordered state of the constitution generally; and the disease will vary considerably in its characters as the one or the other cause may occasion it. According to M. Blandin's theory, that variety which is excited by external injury is *at first* a local affection, and afterwards tends to diffuse itself generally; the fluids, which are altered by the diseased actions going on in the part, having a concentric course, and thus spread themselves through the whole system and excite violent reaction. Erysipelas, on the contrary, arising from an internal cause, is at first generally diffused, and has a tendency to become localized; nature making an effort to determine the disturbing influence towards a single point.

With regard to the anatomical nature or proximate cause of erysipelas, M. B. considers that it consists in acute inflammation of the minute lymphatic vessels of the skin, which are first affected,

and inflammation of the substance of the skin itself afterwards follows. [This idea of the absorbents being inflamed in erysipelas is not new, though M. B. is the first who has extensively applied it, in numerous cases, both to pathology and therapeutics: this same theory has been entertained by several authors; among others, MM. Ribes, Dance, and Chomel.] The degree of inflammation between the lymphatic capillaries and the substance of the skin is not always in equal proportion. In erysipelas from internal causes, it is the latter which predominates; in the traumatic variety, the absorbents are principally affected: and this causes the difference in the seriousness of the affections; for according to M. B., physicians generally find erysipelas a trifling disorder, while surgeons regard it as a most serious disease.

M. Blandin's treatment is founded on the principle that the pre-existing and predominant affection is inflammation of the lymphatics, and that, when this is checked, there only remains simple inflammation of the integuments. As the disease is propagated towards those lymphatic ganglions which are situated most centrically, or nearest to the trunk, it is here that we should commence the treatment, which consists in successive applications of leeches over the absorbent glands, and not on the erysipelatous surface of the skin itself; as in the latter case they only weaken the patient. This plan is principally applicable to the traumatic variety, when situated in the extremities; but he considers that it may be also employed with advantage when the skin of the trunk is affected, and when the disease arises from internal causes.

M. B. has applied his plan of treatment to a great number of cases, and informs us that, during two years that he has employed it, he has scarcely lost a single patient; but he ought to publish the exact number of instances in which he has tried it, with the particulars of the different cases: this would render his statements much more valuable.—*Brit. and For. Med. Rev. for January, from Journal des Connaissances Medico-chirurgicales.* July, 1837.

Recovery from a Wound of the Ascending Aorto. By Dr. Heil.—Joseph Hoffman, æt. thirty-two, a Bavarian soldier, while engaged in a drunken quarrel in the year 1812, received a stab in the left side. The weapon, which was a common table-knife, penetrated the thorax between the fifth and sixth ribs. The left lung was wounded, and the stab was followed by copious hemorrhage. He remained some time exposed to the cold air, and when the doctor saw him, which was about an hour after the receipt of the wound, he was lying still bleeding but apparently lifeless. He was removed to the hospital, and the edges of the wound brought together by plaster, although blood still continued to ooze. After having remained some hours unconscious he came to himself, but was then amaurotic, probably from the abundant depletion which he had undergone. In about four months the external wound had entirely healed, but the amaurosis in spite of all the remedies employed still continued; and in this state he left the hospital. He led it appears an irregular life, and some months afterwards was again brought into the hospital labouring under an attack of pneumonia, of which he died in the year 1813. On examining his body, the cicatrix of the wound in the chest was plainly visible: in laying open the cavity, it was found that the correspondent part of the lung was adherent to the pleura, and that the cicatrix extended through the whole substance of the lung to the back part of the organ, where the weapon must have passed out. From this point the knife appeared to have extended upwards towards the ascending aorta; and in this vessel there was an opening with an irregular border about a quarter of an inch in length, which was occupied by a firm coagulum of blood, (thrombus.) On laying open the vessel the weapon was found to have penetrated completely into its cavity. There was a rounded cicatrix on the inside completely closed up as on the outside. The extraordinary cure had probably taken place from a coagulum having formed during the syncope, into which the man was plunged after receiving the wound, aided by the cold to which he was exposed.

[The description of the cicatrix in the aorta is not very clearly given; but the case is altogether very remarkable, as it shows that wounds of this important vessel are not always *absolutely* mortal, as they are laid down in some systems of classification.]—*Ib. from Henké's Zeitschrift.* 1837–8.

On the immoveable Fracture-bandage. Dy Dr. Fricke.—Dr. Fricke has given reports of sixteen cases of fracture successfully treated by means of Seutin's starch-bandage. He applies it by first rolling the limb with a common broad bandage, over which a layer of starch is placed. On this two pasteboard splints, the length and shape of the fractured limb, and nearly encirling it, are applied wet; then a layer of starch, and over this a roller, after each turn of which the starch is applied; the whole being covered with paper, to prevent its sticking. Fricke has usually found the application of this bandage successful.

The following are some of the advantages attending the use of this bandage:—1. The materials are readily procurable. 2. The apparatus lies close to the inequalities of the extremity. 3. Any part of it can be renewed without disturbing the other parts. 4. It is light, and does not prevent the use of the extremity. 5. The limb is so firmly supported, that in two days the patient can leave his bed and walk about.

If the lower limb be fractured, it should be supported by means of a sling round the neck. In applying this bandage, Fricke recommends the surgeon to wait for the subsidence of swelling and inflammation. He does not think, with Seutin and Velpeau, that the patient might even undertake a journey immediately after the injury when the bandage is dry.—*Ib. from Hamburg Zeitschrift f. d. g. Med. April,* 1838.